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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,702	03/01/2001	Philip K. Zietlow	5183USAD1	2277
7590 12/12/2003				
John A. O'Toole P.O. Box 1113 Minneapolis, MN 55440				
EXAMINER MACKEY, JAMES P				
ART UNIT 1722				
PAPER NUMBER				

DATE MAILED: 12/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/887,702

Applicant(s)

ZIETLOW ET AL.

Examiner

James Mackey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-40 is/are pending in the application.
- 4a) Of the above claim(s) 36-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-29 and 31-35 is/are rejected.
- 7) ☒ Claim(s) 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6-6-02.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. Applicant's election without traverse of Group I, claims 17-35 in Paper No. 9-29-03 is acknowledged.

2. Claims 36-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 9-29-03.

3. Applicant should update the Title to reflect the elected invention, i.e. apparatus only.

4. Applicant should update the status of the parent application, including the patent number, in the insertion at the beginning of the specification.

5. The disclosure is objected to because of the following informalities: the missing data on pages 2 and 5 of the specification should be inserted; on page 9, line 15, "shaft 84" should be numbered --82--; on page 9, lines 27 and 29, "gap 82" should be numbered --84--; and on page 10, line 16, "pulley 30" should be numbered --80--.

Appropriate correction is required.

6. Claim 26 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 26 merely recites how the claimed apparatus is intended to be operated during its intended use; however, such relates only to the intended use of the apparatus, which does not patentably distinguish apparatus claims and therefore does not further limit the subject matter of the apparatus claims. Note that intended use has been continuously held not to be germane to determining the patentability of the apparatus, *In re Finsterwalder*, 168 USPQ 530; the manner

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or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235.

7. Claim 23 is objected to because of the following informalities: in claim 23 at line 1, “the anvil cutter bar” should be --the anvil support bar-- to maintain consistent claim terminology.

Appropriate correction is required.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 17-20, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Washburn (U.S. Patent 3,076,999; Figures 1 and 5).

Washburn teaches a system comprising an extruder (col. 2, line 33) configured to extrude at least one strand/rod/rope 9, 30, a conveyor 12, 40 for conveying the strand from the extruder, a rotary cutter (comprising a plurality of at least eight blades 20, 44 equidistantly spaced along a perimeter of a housing plate 21), the rotary cutter being configured to cut at a rate of at least 5000 cuts per minute (see col. 5, lines 7-8 and 20-24, describing a strand speed of 12 ft/sec and a cut pellet size of 1/16” to 3/16”), and an anvil support bar 19, 41 positioned between the leading end of the conveyor and the rotary cutter for maintaining the strand during the cutting operation, wherein the anvil support bar is an elongated body including a top wall for receiving the strand, a bottom wall, and first and second opposing side walls positioned adjacent the leading end of the conveyor and the rotary cutter, respectively, and the first side wall is concave to provide clearance for the leading end of the conveyor. Note that the recitations regarding the material

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being processed in the claimed system (“aerated confectionery foam”) relate only to the intended use of the claimed apparatus and do not patentably distinguish the claimed apparatus over the prior art; see *In re Finsterwalder*, 168 USPQ 530, and *In re Casey*, 152 USPQ 235. Note also that purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666; a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647.

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Washburn (U.S. Patent 3,076,999; Figures 1 and 5) in view of Jehle (U.S. Patent 2,335,515).

Washburn discloses the system substantially as claimed, as described above, except for the second side wall of the anvil support bar being recessed for directing the cut pieces away from the cutting zone (claims 21-22), except for the spacing of the anvil support bar and the rotary cutter being approximately 0.005 inch (claim 23), and except for a drive roller cooperating with the leading end of the conveyor (claims 24-27). Jehle discloses a cutting system comprising a conveyor 16 for delivering material to a rotary cutter 17, an anvil support bar 12 positioned between the leading end of the conveyor and the rotary cutter, the anvil support bar having a second side wall positioned adjacent the rotary cutter and being recessed (see Figure 8) for directing the cut pieces away from the cutting zone (note page 3, left hand column, lines 3-25), the anvil support bar being spaced from the rotary cutter at a "maximum separation" of 0.01 inch (page 2, left hand column, lines 34-38), and a drive roller 40 adjustably located above the leading end of the conveyor (see Figures 1 and 4) to define a gap sized to engage the material, with a timing mechanism (gears 43, 44) for correlating a speed of the conveyor with a speed of the drive roller (page 2, right hand column, lines 23-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Washburn by providing the side wall of the anvil support bar adjacent the rotary cutter as being recessed, as disclosed in Jehle, in order to facilitate the removal of the cut pieces from the cutting zone. It would have been further obvious to a skilled artisan to modify Washburn by providing a drive roller cooperating with the leading end of the conveyor, as disclosed in Jehle, in order to facilitate the movement of the material to be cut into the rotary cutter, and in order to regulate the height of the material to be cut to thereby regulate the size of the cut pieces. Moreover, it would have been obvious and well within the level of ordinary skill in the art to modify Washburn by providing a spacing between

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the front end of the anvil support bar and the rotary cutter of approximately 0.005 inch in order to optimize the cutting operation efficiency while minimizing wear on the anvil support bar and/or cutter blades, without undue experimentation, especially considering the teaching in Jehle of a maximum separation between the anvil support bar and the rotary cutter of 0.01 inch.

13. Claims 21, 22, 24-26, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Washburn (U.S. Patent 3,076,999; Figures 1 and 5) in view of Hoshi (U.S. Patent 5,658,601).

Washburn discloses the system substantially as claimed, as described above, except for the second side wall of the anvil support bar being recessed for directing the cut pieces away from the cutting zone (claims 21-22), except for a drive roller cooperating with the leading end of the conveyor (claims 24-26), and except for the rotary cutter blades having a cutting angle of 25°-45°, or 35°, with the material face of the blades being substantially perpendicular to the material during the cutting operation (claims 33-35). Hoshi discloses a cutting system comprising a conveyor 2 for delivering material to a rotary cutter A, an anvil support bar B positioned between the leading end of the conveyor and the rotary cutter, the anvil support bar having a second side wall positioned adjacent the rotary cutter and being recessed for directing the cut pieces away from the cutting zone (see, e.g., Figure 1), the rotary cutter blades 5 having a material face 5a substantially perpendicular to the material being cut, a rake face 5d and a guide face 5c, wherein the material face and the rake face define a cutting angle of approximately 35° (see Figure 5 and col. 7, line 65 through col. 8, line 7, wherein θ_1 is 5° and θ_2 is 50°), and a drive roller 1 adjustably located above the leading end of the conveyor to define a gap sized to engage the material. It would have been obvious to one of ordinary skill in the art at the time of

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the invention to modify Washburn by providing the side wall of the anvil support bar adjacent the rotary cutter as being recessed, as disclosed in Hoshi, in order to facilitate the removal of the cut pieces from the cutting zone. It would have been further obvious to a skilled artisan to modify Washburn by providing a drive roller cooperating with the leading end of the conveyor, as disclosed in Hoshi, in order to facilitate the movement of the material to be cut into the rotary cutter, and in order to regulate the height of the material to be cut to thereby regulate the size of the cut pieces. Moreover, it would have been obvious to a skilled artisan to modify Washburn by providing the cutting blades with a cutting angle of approximately 35°, with the material face of the blade being substantially perpendicular to the material being cut, as disclosed in Hoshi, in order to efficiently cut the material.

14. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Washburn (U.S. Patent 3,076,999; Figures 1 and 5) in view of Abe (U.S. Patent 4,120,627).

Washburn discloses the system substantially as claimed, as described above, except for a starch depositor located between the extruder and the rotary cutter, with a shroud surrounding the rotary cutter. Abe discloses a system comprising an extruder 4 for extruding a strand/rope, a conveyor 1 for moving the extruded rope to a rotary cutter 20, a depositor 16 located between the extruder and rotary cutter for applying non-stick powdered material to the extruded strand (col. 2, lines 22-25), and a shroud 19 (clearly shown in Figure 1) surrounding the rotary cutter. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Washburn by providing a non-stick powdered material depositor between the extruder and the rotary cutter, as disclosed in Abe, in order to prevent adherence of the extruded material with the rotary cutter blades (note that powdered starch is a well known equivalent to powdered sugar for

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their non-stick properties). It would have been further obvious to a skilled artisan to modify Washburn by providing a shroud surrounding the rotary cutter, as disclosed in Abe, in order to confine the cut pieces and to provide safety for a machine operator.

15. Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

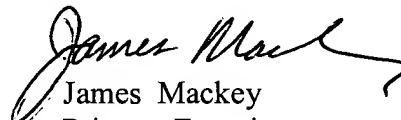
The prior art of record does not teach or fairly suggest a system comprising an extruder, a conveyor, a rotary cutter configured to cut at a rate of at least 5000 cuts per minute, a starch depositor located between the extruder and the rotary cutter, a shroud surrounding the rotary cutter, and a vacuum source fluidly connected to the shroud for creating a negative pressure within the shroud, as claimed in claim 30.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Mackey whose telephone number is 703-308-1195. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 703-308-0457. The fax phone number for the organization where this application or proceeding is assigned is 703-892-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


James Mackey
Primary Examiner
Art Unit 1722

12/1/03

jpm
December 1, 2003